What is AI Literacy? Competencies and Design Considerations

Year: 2020 | Citations: 1515 | Authors: D. Long, Brian Magerko

---

Abstract

Artificial intelligence (AI) is becoming increasingly integrated in user-facing technology, but public understanding of these technologies is often limited. There is a need for additional HCI research investigating a) what competencies users need in order to effectively interact with and critically evaluate AI and b) how to design learner-centered AI technologies that foster increased user understanding of AI. This paper takes a step towards realizing both of these goals by providing a concrete definition of AI literacy based on existing research. We synthesize a variety of interdisciplinary literature into a set of core competencies of AI literacy and suggest several design considerations to support AI developers and educators in creating learner-centered AI. These competencies and design considerations are organized in a conceptual framework thematically derived from the literature. This paper's contributions can be used to start a conversation about and guide future research on AI literacy within the HCI community.